JUMBO MINING CO.



6305 Fern Spring Cove Austin, Texas 78730 (512) 346-4537 Telex # 76-7177

received 6-25-90

DIVISION OF OIL, GAS & MINING

> June 23, 1990 File: OGM6230

Mr. D. Wayne Hedberg Permit Supervisor Department of Natural Resources Division of Oil, Gas and Mining 355 West North Temple 3 Triad Center, Suite 350 Salt Lake City, Utah 84180-1203

FAX NO. 801-359-3940

Dear Mr. Hedberg:

Re: Drum Mine, M/027/007; Revised Notice of Intent; Mizpah Pit

Thank you for your response dated April 23rd to our Notice of Intent to Revise Large Mining Operations, including an itemized list of additional information which you require.

Please find attached a copy of this listing, together with our answers thereto.

I trust that you will find everything in order, but please call me if I can be of further assistance in expediting this Permit.

Sincerely,

E. B. King

F. Rex Rowley, BLM, House Range Resource Area David Rupp, Dept. of Environmental Health D. Hartshorn, Drum Mine

## MINERALS PROGRAM Large Mine NOI Deficiency Review

NOI FORM: MR-LMO MR-REV _X_	FILE NUMBER: M / 027 / 007
	LEAD: Wayne Hedberg
COMPANY: Jumbo Mining Company	
MINE NAME:Drum Mine	
DATE RECVO: March E 1000	
RULE:	
Filing Requirements: R613-004-101	Operation Practices: R613-004-107
Surface and Mineral Ownership: R613-004-104	107.1.11 107.1.12 107.1.13 X***
Maps, Drawings and Photos: R613-004-105 105.1 105.1.11 105.1.12 105.1.13 105.2 105.2.11 105.2.12 105.3.11 105.3.12 105.3.13 105.3.14 105.3.15 105.3.16 105.3.17 105.3.18 105.4	107.1.14 107.1.15 107.2 107.3 107.4 107.5 107.6  Hole Plugging Requirements: R613-004-108 108.1 108.2 108.2.11 108.2.12  Impact Assessment: R613-004-109 109.1 109.2 109.3 109.4
Deration Plan: R613-004-106 106.1 106.2 106.3 106.4 106.5 106.6 106.7 106.8 106.9	109.5 X  Reclamation Plan: R613-004-110 110.1 110.2 110.3 110.4 110.5.11 110.5.12

Page 2 Deficiency Review

Reclamation Practices: R613-004-111 111.1.11 111.1.12 111.1.13 111.1.14 111.1.15 111.2 111.3 111.4 111.5 111.6 111.7 111.8 111.9 111.10 111.11 111.12 111.13

- No scale or key indicated on map provided.
- \*\* Anticipated post-mining pit configuration design drawing details and typical x-sections.
- \*\*\* Those holes not within pit area to be mined out.
- \*\*\*\* ALL variance requests must be specified in detail as part of the revision application.
- \*\*\*\*\* The reclamation surety estimate will be evaluated pending resolution of the deficiency information requested above.

jb MN92/5-6

## MIZPAH PROJECT COMMENTS

( 1) REG. R613-004-104

See Map R613-004-104 "Surface & Mineral Ownership"

( 2) REG. R613-004-105.1.14

See Map R613-004-105.1.14 "Previous Disturbed Areas"

(3) REG. R613-004-105.2

See Map R613-004-105.2 "Base Map - Surface Facilities"

(4) REG. R613-004-105.3.11

No map needed because all regraded waste dump slopes will be less or equal to 2h:1V slope

(5) REG. R613-004-105.3.14

See map R613-004-105.3.14 "Area To Be Disturbed But Will Not Be Reclaimed"

( 6) REG. R613-004-105.3.16

See Map R613-004-105.3.16 (A),(B),(C)

- (A) "Geology Structure Map"
- (B) "Topsoil Location Map"
- (C) "Vegetation Survey Map"

( 7) REG. R613-004-105.3.17

See Map R613-004-105.3.17 "Reclamation Activities and Treatment Map"

(8) REG. R613-004-105.3.18 (A) & (B)

See Map R613-004-105.3.18 (A) & (B) "Post Mining Pit Configuration"

- (A) Cross-section Plan Map
- (B) Cross-section A-A' & B-B'
- (9) REG. R613-004-106.4
  - (a) Ore Rock is hydrothermally altered limestones and shales
  - (b) Waste Rock is limestones & shales
  - (c) Approximate annual tonnage to be mined = 500,000
- (10) REG. R613-004-106.5

Very little soil exists in the areas to be disturbed. Approximately 1400 yards of poorly developed soil (60-70% coarse rock) can be removed and stockpiled (see map R613-004-105.3.16 (B)) from the bottoms of small washes. A variance has already been applied for.

(11) REG. R613-004-106.6

Soil stockpiles will be on old drill roads that lie on small ridges between drainage areas. Frontend loaders will redeposit soil onto waste dumps before scarification.

(12) REG. R613-004-106.8

No groundwater is known. Deepest hole in area to be disturbed is 300' (dry). Deepest hole in area 1000' (dry).

- (13) REG. R613-004-106.9 See various maps.
- 14) REG. R613-004-107.1.13

All holes outside of area to be disturbed (see Map R613-004-105.1.14 "Frevious Disturbed Area") will be plugged as set forth in Rule R613-004-108.

- (15) REG. R613-004-109
  - (.1) (a) Groundwater is not known

- (b) No Permanent surface water occurs. The NW dump will be placed on a hill side and the So. dump will be placed in a small valley near the top of its watershed, therefore any runoff from rain will be little affected by the waste piles.
- (.2) No endangered species or habitats occur in the area.
- (.3) Soil resources are minor and mining will have very little impact.
- (.4) (a) Slopes of waste dumps will have a final slope angle off no steeper than 2H:1V as stated in R613-004-105.3.11.
  - (b) Erosion will be controlled by (1) regrading slopes to 2:1 or less (2) placing coarse rock slopes and (3) reseeding
  - (c) Air quality and public health and safety will be in accordance with the laws set forth by Mine Safety and Health Ad.
- (.5) A soil variance has already been requested.

## (16) REG. R613-004-110 Reclamation

- (.1) Current land use other than mining is winter sheep grazing. Fost mining land use will be the same.
- (.2) (a) Roads that are to be reclaimed will be scarified and seeded.
  - (b) Where highwalls are accessible, they will be berned.
  - (c) Slopes of wastepile will be regraded and seeded; slopes of pit will remain open
  - (d) Tops of waste piles and ramps to pit will be replaced with any salvaged soil, scarified and seeded
  - (e) Drill holes will be plugged as stated above.
- (.3) Only the pit, waste piles and roads will remain after mining. All buildings (none) and equipment will be removed.
- (.5.11) Revegetation will consist of grading, replacing any top soil salvaged, scarifying and seeding. Seed mixtures and rates will be the same as the Drum Mine. Seeding will take place in the fall

- (.5.12) A variance has been requested for soil. Erosion control has been mentioned above. Junipers will be salvaged on land disturbed and will be placed on tops of waste piles to provide some cover and mulching for seeds.
- (17) REG. R613-004-111 Reclamation Practice

- (.1.12) All trash, debris, scrap, etc. will be buried or hauled to Drum for disposal.
- (.1.13) All drill holes outside of disturbed area will be plugged as set forth in Rule R613-004-108
- (.1.14) Warning signs will be posted
- (.3) As mentioned above waste piles & soil stockpiles will be placed in areas away from drainage. Slopes of dumps will be from 0-30 degrees (2:1). Coarse rock and seeding will control slope erosion.
- (.6) Slopes of waste piles will have a slope of no greater than 2H:1V as stated in Rule R613-004-103.311.
- (.7) No highwall wall in pit will be steeper than 45 degrees
- (.8) Except for the existing road, all new roads will be reclaimed. The old road not to be reclaimed will have adequate drainage provided.
- (.10) All trenches and pits made by Jumbo will be reclaimed in the Mizpah area.
- (.11) No structures and equipment will remain
- (.12) any topsoil salvaged will be placed on tops of dumps
- (18) REG. R613-004-112 Variance
  - (.1.11) R613-004-109 Soil Resources
  - (.1.12) Variance requested is the emplacement of soil on areas to be reclaimed
  - (.1.13) Lack of soil resources in the area is apparent.

    Very little soil exists in the area to be

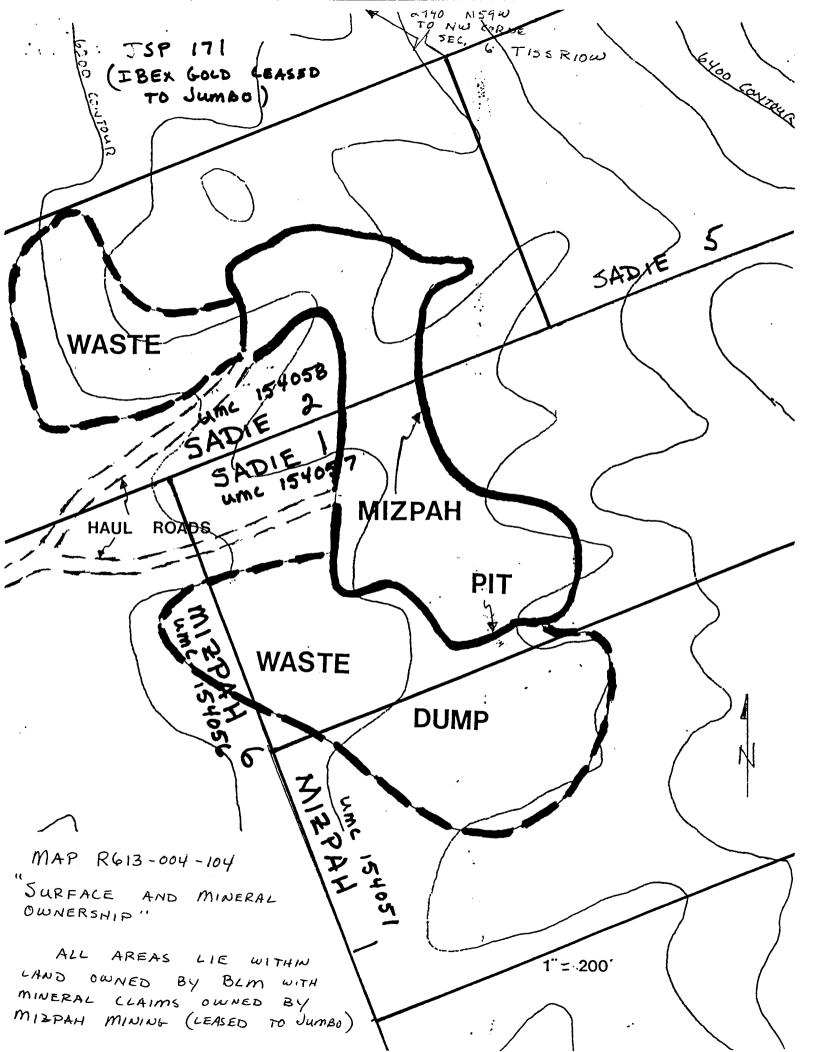
    disturbed
  - (.1.14) Any soil which does occur in the small drainages will be salvaged and replaced on tops of dumps.

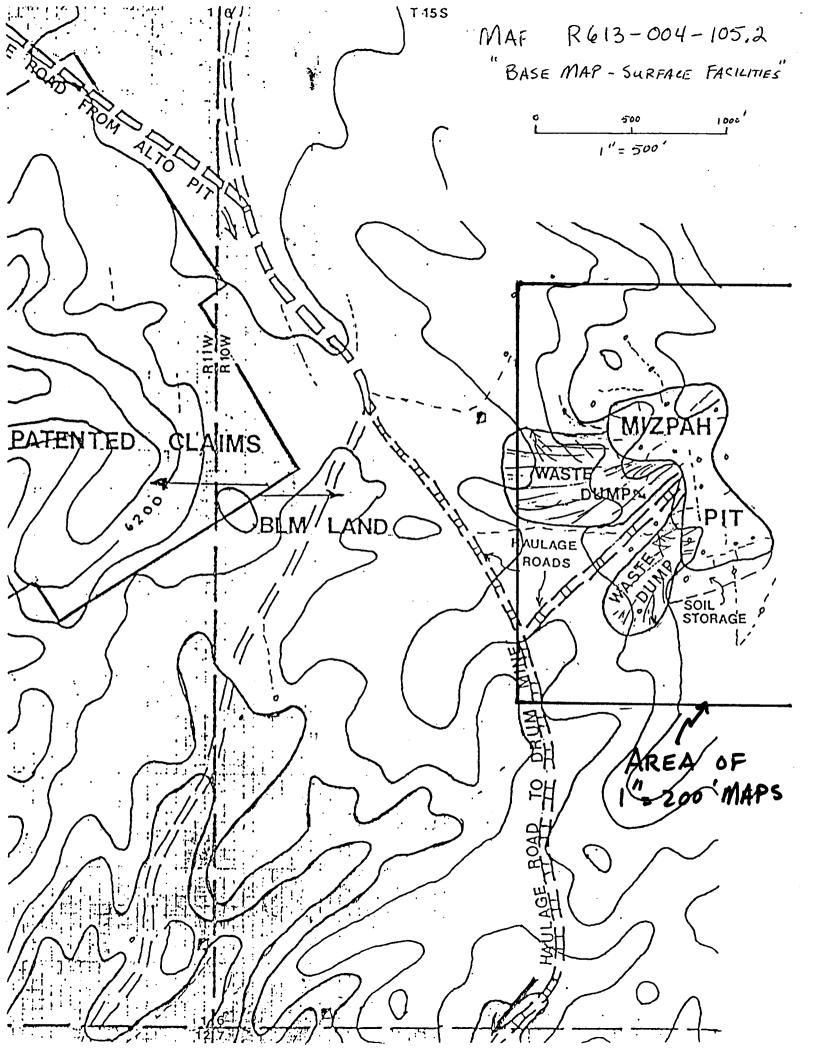
    Junipers in the area of disturbance will be saved

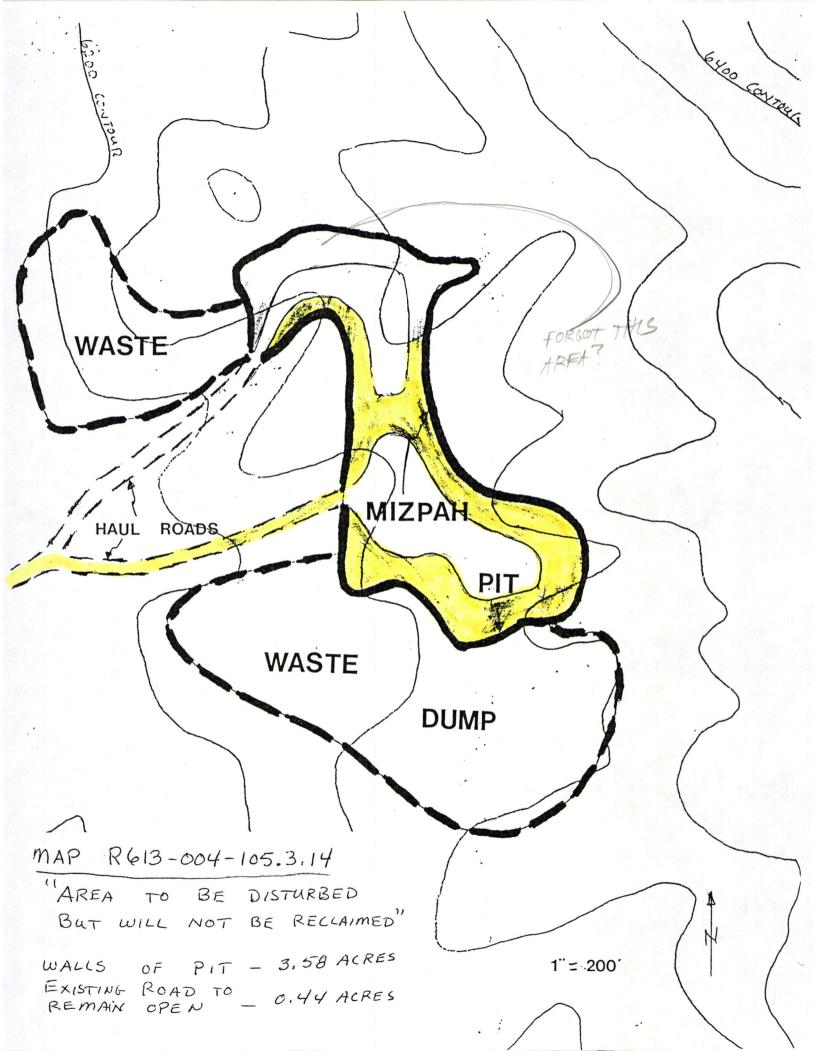
and placed on tops of dumps to provided shade and mulch for seeding.

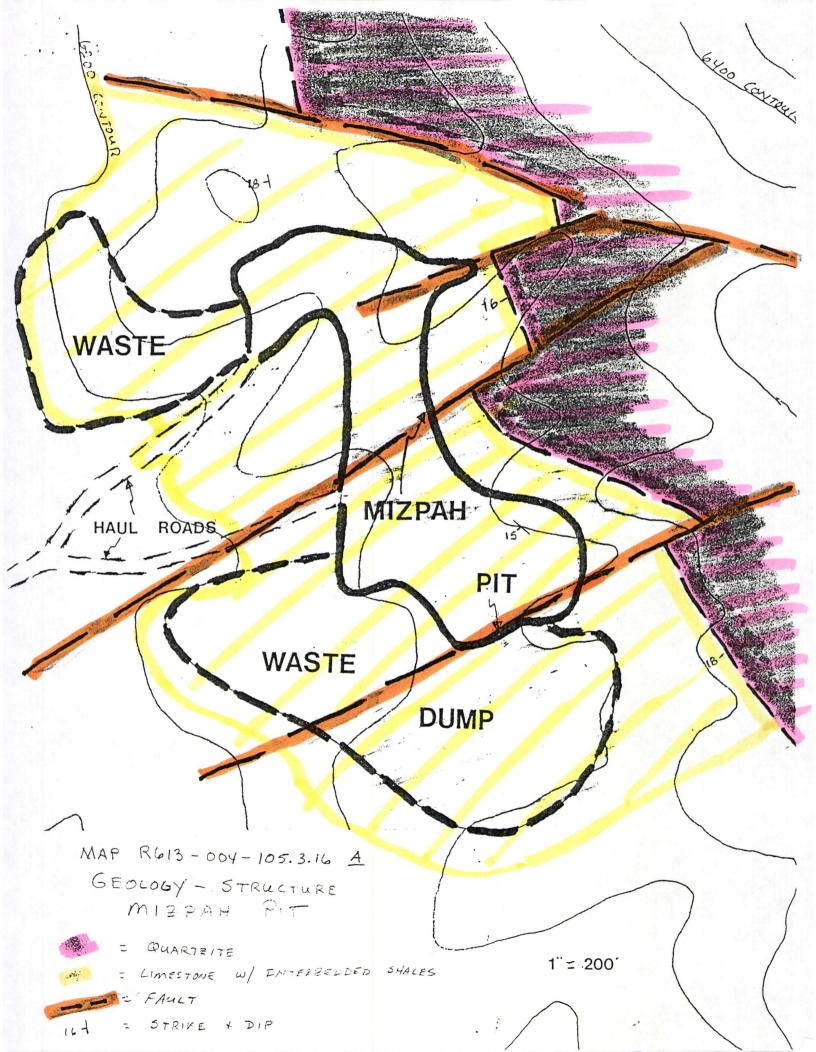
(19) REG. R613-004-113.4

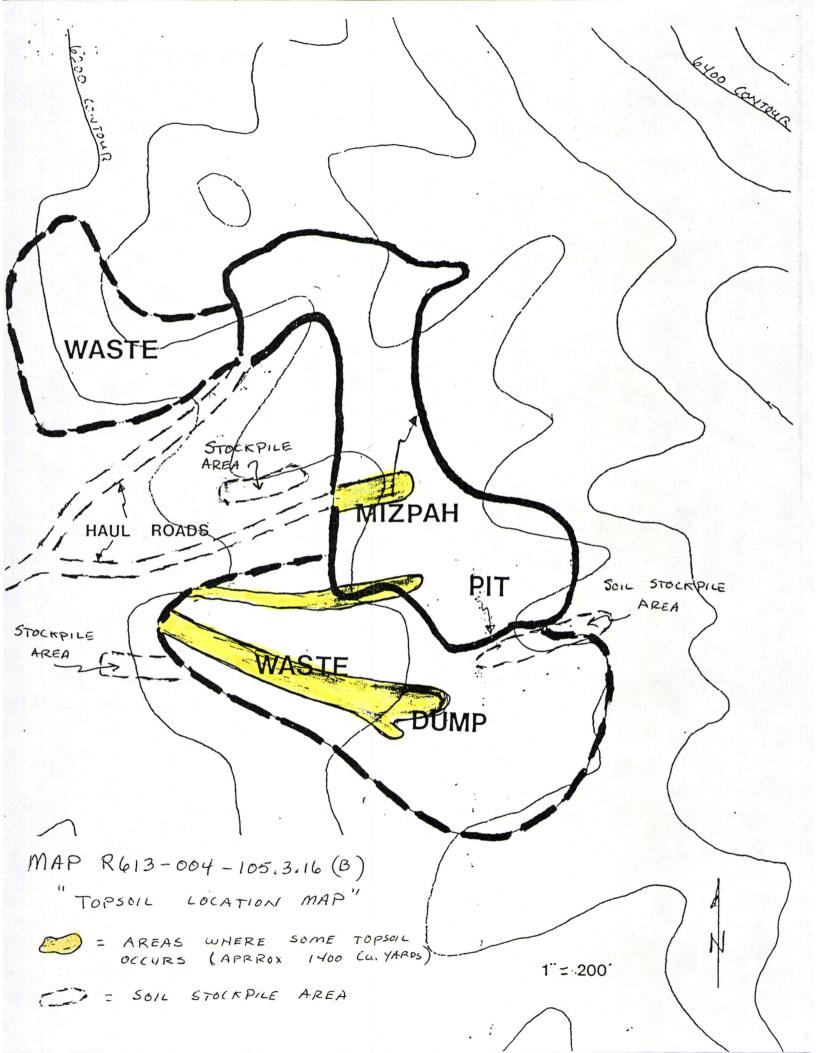
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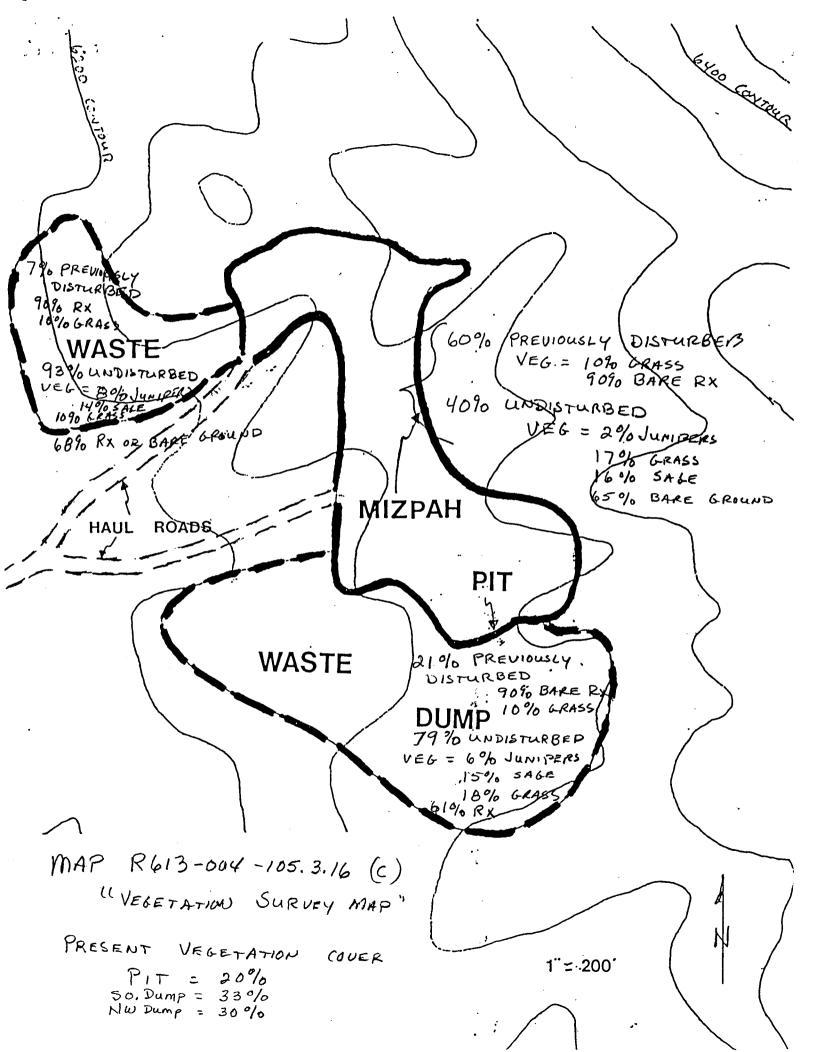


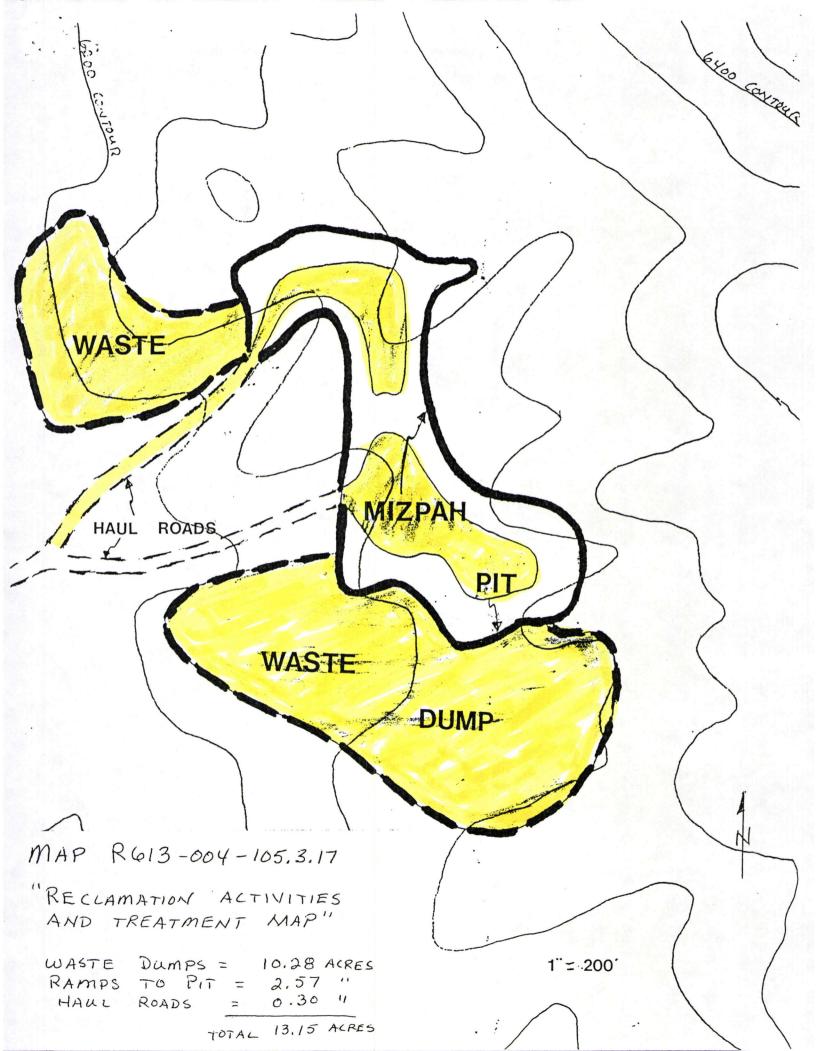


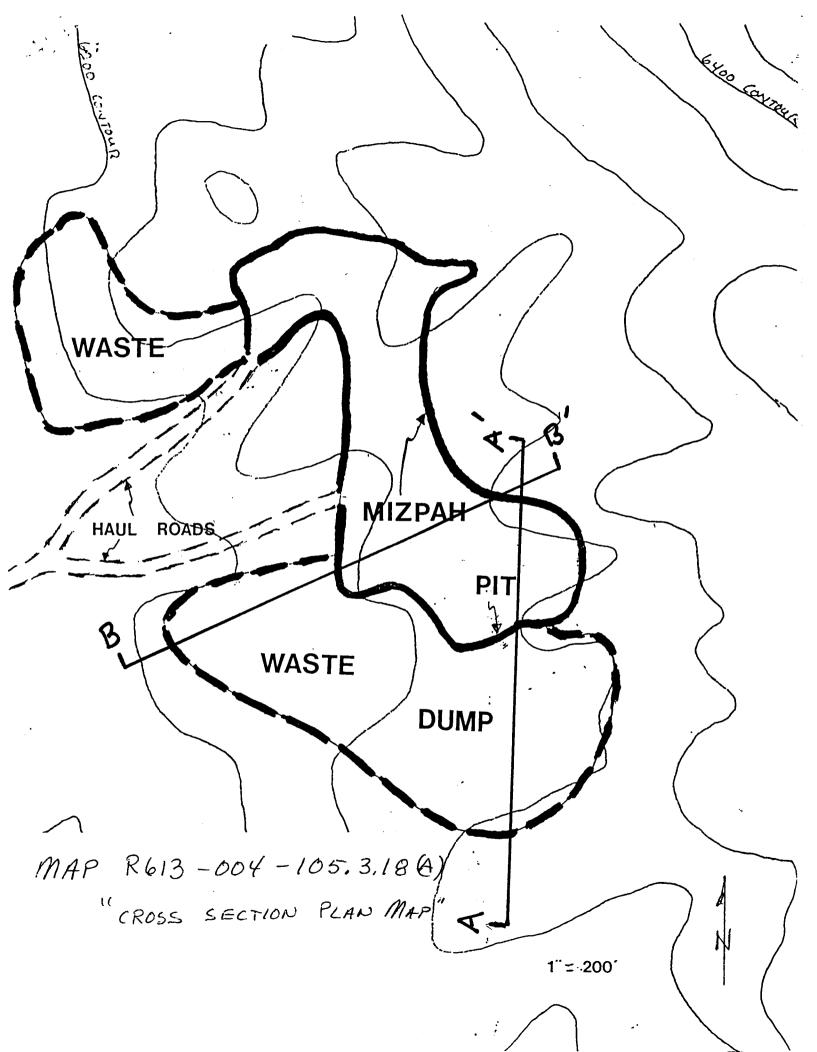


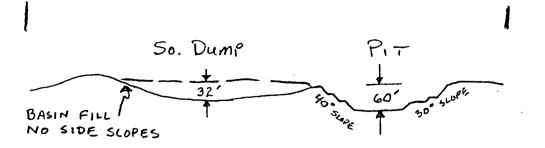


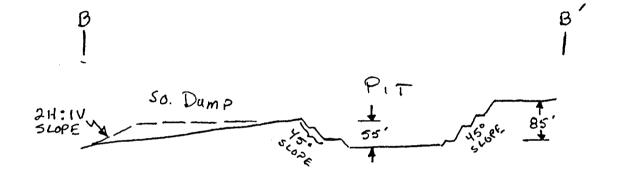












MAP R613 -004 -105.3.18 (B)
"CROSS SECTIONS A-A" + B-B"

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